Cruttwell, Rev. Canon C. J. (1911).
Dollman, H. C. (1919).
Edwards, J. (1928).
Elliott, E. A. (1936).
Fowler, Rev. Canon W. W. (1923).
Fryer, H. F. (1930).
Garde, P. de la (1913).
Gardner, G. (1921).
Gillo, R. (1891).
Gorham, Rev. H. S. (1920).
Hardy, J. (1899).
Harris, J. T. (1892).
Harwood, B. S. (1933).
Holland, W. (1930).
Janson, E. W. (1891).
Janson, O. (1927).
Jenner, F. H. A. (1924).
Johnson, W. F. (1934).
King, J. J. F. X. (1933).

Lewis, G. (1926). Mason, P. B. (1904). Matthews, Rev. A. (1897). Newbery, E. A. (1928). Piffard, A. (1910). Routledge, G. B. (1934). Saunders, E. (1910). Sharp, Dr D. (1922). Sharp, W. E. (1919). Stevens, G. (1899). Stott, C. E. (1935). Taylor, J. (1920). Taylor, J. K. (1923). Thompson, M. L. (1934). Waterhouse, C. O. (1917). Waterhouse, E. A. (1916). West, W. (1918). Wood, Rev. Canon J. (1924). Young, Morris (1897).

## APPENDIX B.

Kirby, W. F. (1912).
Lubbock, Sir John (1st Lord Avebury (1913).
Michael, A. D. (1927).
Morice, Rev. F. D. (1926).
Rayward, A. L. (1935).
Rothney, G. A. J. (1922).
Saunders, E. (1910).
Silverlock, O. C. (?).
Step, E. (1932).
Theobald, F. V. (1930).
White, F. Buchanan (1894).

## Champion, G. C. (1927). Chapman, Dr T. A. (1922). Chitty, A. J. (1908). Collett, E. P. (1937). Dale, C. W. (1906). Douglass, J. W. (1905).

Evans, W. (1923). Fowler, Rev. Canon W. W. (1923). Frisby, G. E. (1936). Janson, E. W. (1891).

Leman, G. C. (1934).

Bignell, C. G. (1910).

Bingham, Col. C. J. (1908).

## DIPTERA: PROGRESS AND OBSTACLES TO PROGRESS, 1890-1938. By J. E. Collin, F.R.E.S.

If the state of our knowledge of the Palaearctic Diptera in 1938 be compared with that in 1890, when the first number of this magazine was published, one cannot fail to realise the enormous advance that has been made, not only in the number of described species, but also in their classification. The publication in 1903-07 of Kertesz's Catalogue of the Palaearctic Diptera was undoubtedly a great stimulus to students of the Order, but even at that time, and still more in 1890, many families possessed only a skeleton framework of the genera and species now known to exist, others (chiefly those composed of the larger more conspicuous species) were more complete, but in the last half century all have received attention from competent taxonomists, and very much more is known about their true specific and generic characters. It has become increasingly evident that many of the more reliable characters are often microscopic or borne by parts normally more or less hidden. and the study of these characters with the resultant discovery of many unsuspected affinities and new species, has been one of the outstanding features of the period under discussion. It has become more than ever essential that, before describing any species, one should take the trouble to discover the characters one ought to describe.

The Diptera are no exception to the rule that some genera and species stand out isolated while others exhibit a gradually descending

gradation of isolation. Much work has been done in recent years in the lower scale of these gradations, indeed in the case of genera it is probable that some students have gone too low and suggested generic names where the degree of isolation no longer warrants their use, the extreme limit being that adopted by Townsend in 1935 (Manual of Myiology, II, p. 38) where it is stated that "two species, the progeny from whose crossing is sexually infertile, belong to separate natural genera. All those species which can produce fertile crosses belong to the same natural genus."

Very little progress has been made in our knowledge of the early stages of the Palaearctic Diptera, except in certain families of the Nematocera and some of the leaf-mining Muscidae, but flies of the genus *Drosophila* have proved invaluable laboratory material in the study of heredity and genetics.

An important event in the early part of the period was the publication in 1903 of a set of "International Rules for Zoological Nomenclature." In spite of the difficulties inherent in any attempt to make rules governing work done in the past these International Rules were remarkably well drafted, but failed in one respect. It was not realised that the permanent association of a generic name and its genotype being a complete innovation it was impossible for any rule for genotype fixation dependent upon past actions to prove satisfactory, so, naturally, Article 30, dealing with this point proved unworkable, and the "Zoological Commission," appointed to interpret the rules and to deal with any difficulties which might arise, were obliged to reconsider this Article. They also failed to realise the true facts, and finally recast the Article making two drastic alterations. The use of the amended Rule has resulted in wholesale changes in well-known generic names, and, what is worse, changes in the application of some of the names, nor is that all, for in the majority of these changes the reasons for making them cannot fail to offend against the intelligence and sense of justice of any rightminded person. We are asked in the first place to believe that when one of the old authors quoted a species as a "type" or example of a genus he meant a "genotype" in the sense of the new Rules, when it is obvious that he meant nothing of the sort; secondly, to agree that work, however conscientiously done, in connection with the application of a generic name by an author who divided a genus, but did not quote a "type" or example, shall have no priority over the subsequent mere quotation of such a type; i.e., that work done according to the regulations prevailing at the time must comply with regulations made subsequently in order to be recognised. The Commission also altered Article 30 in relation to genera described without mention of included species. The original Article without being definite plainly indicated that the "origin" of a genus was the date when species were included, therefore genera published without mention of species were outside the Rules until validated by association with species. An exception might well have been made in cases where the author of such a genus subsequently himself placed species therein, for in such cases there could be no uncertainty as to the right of such species to be included in the genus, or even where a subsequent author had access to the original author's collection and could prove which species were intended to be included. The Commission, however, decided that all such genera were

valid from the date of publication and that any species thought to answer to the description would be available as genotype. An amazing decision for those professing to aim at stability in nomenclature considering that the right of such a genotype to inclusion in the genus might be challenged at any time.

All difficulties would have been met, and stability with continuity assured, by irrevocable decisions in all cases where genotype fixation, or the use of generic names, were uncertain under the original Article 30. It is quite certain that irrevocable decisions are necessary before an approximation to stability in nomenclature can be attained.

At the present time our knowledge of the insect world and of Diptera in particular, is far in advance of what it was fifty years ago, but we are deliberately making the study of insects more difficult by refusing to recognise that many of the birth-throes of Entomological Nomenclature are not worthy of recognition, and that continuity in the use of generic names is of far greater importance than blind adherence to rules framed by those who knew little or nothing of entomological history, and consequently often unjust in application.

## **DIPTERA: 1890-1938.**

AN AMATEUR'S RETROSPECT.

By H. W. Andrews, F.R.E.S.

Although my recollections as a dipterist do not cover the full period commemorated by this Jubilee number, I can go back over the greater part of it, as it was in 1899 that I joined the Entomological Society of London, in that year under the Presidency of Mr Verrall, and, giving up Lepidoptera, began to collect Diptera.

In those days dipterists were far fewer in numbers than at present; at their head was the triumvirate of Verrall, Collin, and Yerbury, of whom Collin alone is left. Other well-known names were Dr Mead, of Bradford, known by his monographs on Anthomyidae, Bradley and Wainwright at Birmingham, and Grimshaw and King in Scotland. I have, too, most kindly recollections of Mr F. C. Adams, of London and Lyndhurst, who gave me a lot of help as a beginner, both in types and identifications. Major (then Mr) Austen was in charge of the Diptera at South Kensington, where the British section was rapidly increasing in numbers and value through the donations of Colonel Yerbury, who was one of those rare amateur entomologists who collect for others rather than themselves; but Austen was already becoming more and more occupied with the increasingly important medical and economic aspects of dipterology, which were soon to take up all his time.

Here I think it is fitting to pay a tribute to Mr Verrall, whose immense industry, endless enthusiasm and wide knowledge of palaearctic diptera, enabled him, practically single-handed, to establish order out of chaos and set the study of our native species firmly on its feet. His memory is kept alive amongst all entomologists by the annual "Verrall Supper," which, under the auspices of the Entomological Club, perpetuates the hospitality he, as a member of that Club, initiated as far back as 1887.

The chief difficulty for students then, as now, though now in far less degree, was the lack of reliable text-books in English. The three